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GAU2811/LB

PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/491,581
Filing Date	January 25, 2000
First Named Inventor	Shigeto Igarashi
Group Art Unit	2612
Examiner Name	
Attorney Docket Number	2811

Total Number of Pages in This Submission

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Petition To Make Special Under Rule 102(d)
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

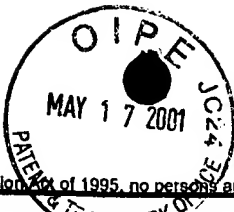
Firm or Individual name	David O'Reilly
Signature	
Date	May 17, 2001

CERTIFICATE OF MAILING

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Typed or printed name	David O'Reilly, Reg. No. 26,102	Date	May 17, 2001
Signature		Date	May 17, 2001

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 Date: May 17, 2001

By:
 David O'Reilly, Reg. No. 26,102



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FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$130.00)

Complete if Known

Application Number 09/491,581
Filing Date January 25, 2000
First Named Inventor Shigeto Igarashi
Examiner Name
Group Art Unit 2612
Attorney Docket No. 2811

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number 15-0640
Deposit Account Name David O'Reilly

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
☒ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:
☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 710	201 355	Utility filing fee	
106 320	206 160	Design filing fee	
107 490	207 245	Plant filing fee	
108 710	208 355	Reissue filing fee	
114 150	214 75	Provisional filing fee	

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES

Total Claims -20** = X =
Independent Claims -3** = X =
Multiple Dependent =

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 80	202 40	Independent claims in excess of 3
104 270	204 135	Multiple dependent claim, if not paid
109 80	209 40	** Reissue independent claims over original patent
110 18	210 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

*or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for ex parte reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 390	216 195	Extension for reply within second month	
117 890	217 445	Extension for reply within third month	
118 1,390	218 695	Extension for reply within fourth month	
128 1,890	228 945	Extension for reply within fifth month	
119 310	219 155	Notice of Appeal	
120 310	220 155	Filing a brief in support of an appeal	
121 270	221 135	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,240	241 620	Petition to revive - unintentional	
142 1,240	242 620	Utility issue fee (or reissue)	
143 440	243 220	Design issue fee	
144 600	244 300	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Processing fee under 37 CFR 1.17(q)	
126 180	126 180	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	
146 710	246 355	Filing a submission after final rejection (37 CFR § 1.129(a))	
149 710	249 355	For each additional invention to be examined (37 CFR § 1.129(b))	
179 710	279 355	Request for Continued Examination (RCE)	
169 900	169 900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$130.00)

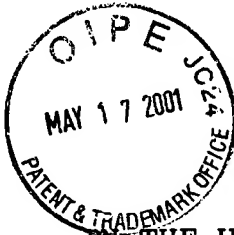
SUBMITTED BY

Name (Print/Type)	David O'Reilly	Registration No. (Attorney/Agent)	26,102	Telephone	(805)446-2759
Signature		Date	May 17, 2001		

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Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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Docket No. 2811

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Shigeto Igarashi

Group Art Unit: 2612

Serial No: 09/491,581

Filed: January 25, 2000

For: SIGNAL AMPLIFYING CIRCUIT IN CCD CAMERA

Westlake Village, CA

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

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PETITION TO MAKE SPECIAL UNDER RULE 102(d)

JUN - 6 2001

Sir:

Applicant in the above-identified application requests advancement of the examination of the application under Rule 102(d).

The undersigned, David O'Reilly, declares that he is the attorney of record in the above-identified pending patent application. That he is the attorney for applicant Shigeto Igarashi and is completely familiar with the invention disclosed and claimed in the application.

The invention is an electronic signal amplifying circuit for use with a charge coupled device (CCD) to broaden the range illumination to approximately 0.02 lux for recording images or taking photographs. In low light conditions, the amplification is increased with the signal to noise (S/N) ratio being ignored by automatically inserting an amplifying circuit that ignores

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Date: May 17, 2001

By:

David O'Reilly, Reg. No. 26,102

the S/N until it reaches a predetermined value. When there is sufficient light conditions image recording or photograph are recorded at a high S/N ratio and a high degree of amplification.

All the claims in the application are limited to a single invention of an auxiliary amplifying circuit for use in low light conditions. The dependent claims are to variations of the system with the auxiliary amplifier such as the use of detectors to decide when to use the low light auxiliary amplifier.

A pre-examination search was made in Classes 348 subclass 255, and Classes 300, 301, 366, and 707. The references found in the thorough and complete search are listed in the attached form List of Prior Art Cited. Copies of these references are enclosed and are in addition to the references disclosed in the Disclosure To The Examiner filed May 30, 2000 incorporated herein by reference.

U.S. Patent No. 3,777,056 of Pieters removes glare by developing a reference value. The reference value is then compared with an amplifier output. The white amplitude level is clamped if there is glare.

U.S. Patent No. 4,884,140 of Park discloses a circuit to compensate for vignetting. Vignetting is a phenomenon of brightness at the circumference becoming lower than the central brightness. The patent compensates by obtaining parabolic waveform voltages, adding the voltages and using the added voltages to control amplification.

U.S. Patent No. 5,455,685 of Mori describes an exposure control device. The patent detects and integrates values representing the average light and then controls the operation of the iris and amplification to control exposure.

U.S. Patent No. 5,610,654 of Parulski et al discloses an automated exposure control system that uses a variable amplifier. A microprocessor controls the output of a programmable amplifier from values in a look-up table or by use of an algorithm.

U.S. Patent No. 5,614,948 of Hannah discloses a gain control amplifier having controls by applying various levels of gain to an image. The amplification of the gain control amplifier is continually updated by a processor which may be a computer that provides real time gain settings to the gain control amplifier.

U.S. Patent No. 5,742,340 of Alves discloses compensation to an automatic gain control amplifier using a fiber optic link. Fiber optic link 13 provides a reference voltage from a light sensing array to adjust AGC circuit 20.

U.S. Patent No. 5,978,024 of Lee discloses a system to compensate for "blooming". Blooming is a phenomena that occurs when a photo diode receives light having too high intensity. An anti-blooming circuit comprised of a DC stage 71, an input stage 72, and an anti-blooming stage 73 provides an output that

increases or decreases the bias on CCD 60.

None of the patents discuss above or the references cited in the Disclosure to the Examiner filed May 30, 2000 teach or suggest a circuit for low light conditions that amplifies the signal while ignoring the signal to noise (S/N) ratio and then switching to higher signal to noise amplification when there is sufficient bright light as described in the claims.

The undersigned declares further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Please charge the cost of this Petition to Deposit Account No. 15-0640.

Consideration and approval of this petition is earnestly solicited.

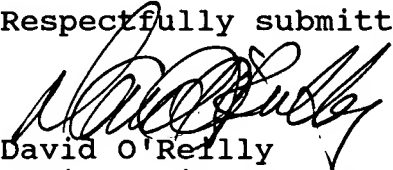
Dated: May 17, 2001

DO'R/en

Enclosures

Make all calls to: (805) 446-2759

Respectfully submitted,


David O'Reilly
Registration No. 26,102
Attorney for Applicant

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